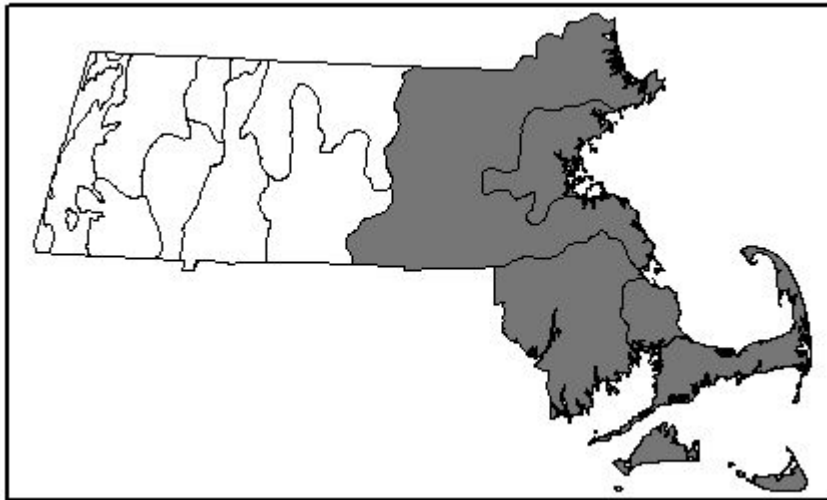


Community Name: MARITIME DUNE COMMUNITY

Community Code: CT2B1B0000

SRANK: S2



Concept: This is the classic community of sand dunes, with patches of herbaceous plants interspersed with areas of bare sand and shrubs.

Environmental Setting: The maritime dune community occurs on windswept dunes, within the salt spray zone, often landward of the Beach Strand Community and grading into shrubland or woodlands on the more sheltered back dunes. Dunes are deposited by wind action or storm overwash. Wet areas between dunes are Interdunal Swale Communities. Usually part of a barrier beach system. Ability of dunes to move is an important part of the habitat they provide.

Vegetation Description: Sand dunes characterized by expanses of beach grass (*Ammophila breviligulata*) with seaside goldenrod (*Solidago sempervirens*), beach pea (*Lathyrus japonicus*), and beach and golden heathers (*Hudsonia tomentosa* and *H. ericoides*). Shrubs such as bearberry (*Arctostaphylos uva-ursi*), bayberry (*Myrica pensylvanica*), lowbush blueberry (*Vaccinium angustifolium*), sweet fern (*Comptonia peregrina*), and beach plum (*Prunus maritima*) grow on protected slopes and some interdunal areas, mostly sparse, but becoming dominant to form shrublands. Poison ivy (*Toxicodendron radicans*) is often dense. Salt hay (*Spartina patens*), common hairgrass (*Deschampsia flexuosa*), little blue stem (*Schizachyrium scoparium*), and poverty grass (*Danthonia spicata*) are common grasses of the community. Pinweed (*Lechea* spp.), nutrush (*Cyperus* spp.) and sand jointweed (*Polygonella articulata*) grow mixed with *Hudsonia*. Scattered pitch pine (*Pinus rigida*) occur in some dune systems. Actual composition and structure of the vegetation depends upon recent dune stability (deposition and erosion) and distance from the ocean.

Associations:

Habitat Values for Associated Fauna: A variety of seabirds, shorebirds, and song birds nest at the base and sides of dunes and in the interdunal area. The particular species depend upon topography, hydrologic regime, and the amount and type of plant cover. Vernal pools occur in some dune systems, serving as important feeding and breeding areas for a variety of reptiles and amphibians, invertebrates, and birds and mammals. Diamondback terrapins (*Malaclemys terrapin*) use dunes for nesting. Northeastern Beach Tiger Beetles overwinter in the dunes.

Associated Rare Plants:

ARISTIDA TUBERCULOSA

SEABEACH NEEDLEGRASS

SC

Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries & Wildlife

Associated Rare Animals:

ASIO FLAMMEUS	SHORT-EARED OWL	E
CHARADRIUS MELODUS	PIPING PLOVER	T
CIRCUS CYANEUS	NORTHERN HARRIER	T
MALACLEMYS TERRAPIN	DIAMONDBACK TERRAPIN	T
ONCONEMIS RIPARIA	DUNE NOCTUID MOTH	SC
STERNA HIRUNDO	COMMON TERN	SC

Examples with Public Access:

Crane Beach, Ipswich; Plum Island, Parker River NWR; Sandy Neck Barnstable; Scusset Beach, Sandwich; Cape Cod National Seashore - Provinceland Dunes, Coast Guard Beach dunes, Nauset Beach dunes; Monomoy NWR, Chatham; Black Beach, Falmouth; Nantucket; Martha's Vineyard; Horseneck Beach State Reservation, Westport.

Threats:

Exotics, (*Lonicera morrowii*, *Lythrum salicaria*, and *Artemisia stelleriana*). Traffic (foot as well as vehicular) breaks the surface structure and removes vegetation. Road cuts change wind patterns and so alter deposition, erosion, and vegetation.

Management Needs:

Removal of exotics at best sites. Continue closure of dunes to foot traffic. Limit roads and other cuts through the dunes.

Synonyms

USNVC/TNC:

Includes: Sand dunes - -- *Ammophila breviligulata* Herbaceous Alliance - *Ammophila breviligulata* - *Carex silicea* Herbaceous Vegetation [CEGL006274]; and *Hudsonia tomentosa* Dwarf-Shrubland Alliance -- *Hudsonia tomentosa* - *Arctostaphylos uva-ursi* Dwarf - Shrubland [CEGL006143] [also in Coastal heathland community]; [also in Maritime Shrubland] *Toxicodendron radicans* vine- Shrubland Alliance -- *Smilax glauca* - *Toxicodendron radicans* Vine - Shrubland [CEGL003886]; part of [also in Maritime Shrubland] *Myrica pensylvanica* - (*Prunus maritima*) Shrubland Alliance -- *Myrica pensylvanica*- *Rosa rugosa* Shrubland [CEGL006295].

MA (old name):

COASTAL DUNE COMMUNITY.

ME:

Includes 2001 - Dune Grassland and some of Rose- Bayberry Maritime Shrubland. 1991 - Sand dune community, some of Maritime shrubland community.

NH:

Coastal Dune Community and Includes: Beach grass grassland; and part of Inland beach strand community and includes *Hudsonia* sand and gravel barren.

VT:

Not applicable.

NY:

Maritime dunes and part of Maritime heathland and Maritime beach.

CT:

Includes: *Ammophila breviligulata* medium-tall grasslands; *Hudsonia tomentosa* dwarf- Shrubland vegetation [also included in Coastal heathland community].

RI:

Includes: Maritime dune - a. Beach grass primary dune and b. beach heather- 2ry dune association.

Weatherbee:

Not applicable.

Author:

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Date:

7/14/99